

WHAT IS CLAIMED IS

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1. An apparatus for forming an image by  
use of a plurality of light beams, which are  
simultaneously modulated according to image signals  
and joined together on a photoconductive surface to  
10 form the image, comprising:

a photoconductive drum having the  
photoconductive surface and a reference mark;

15 an pattern supplying unit which supplies  
image data in synchronization with detection of the  
reference mark associated with rotation of the  
photoconductive drum; and

20 drawing systems which create moiré stripes  
on the photoconductive surface by simultaneously  
drawing overlapping sets of slanted lines with the  
respective light beams according to the image data,  
and draw a reference position mark on the  
photoconductive surface according to the image data.

2. The apparatus as claimed in claim 1,  
further comprising a computing unit which computes  
an amount of correction of position of the light  
5 beams on the photoconductive surface in a main scan  
direction in response to comparison between position  
of the moiré stripes and position of the reference  
position mark, the main scan direction being  
substantially parallel to an axis of the  
10 photoconductive drum.

15 3. The apparatus as claimed in claim 1,  
further comprising a circuit which adjusts position  
of the light beams on the photoconductive surface in  
a main scan direction according to comparison  
between position of the moiré stripes and position  
20 of the reference position mark, the main scan  
direction being substantially parallel to an axis of  
the photoconductive drum.

4. The apparatus as claimed in claim 2,  
further comprising a sensor which detects the  
position of the moiré stripes.

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5. The apparatus as claimed in claim 2,  
10 wherein said computing unit computes the amount of  
correction of position of the light beams by  
interpolating data that are obtained for at least  
three positions along a circumference of the  
photoconductive drum.

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6. The apparatus as claimed in claim 2,  
20 wherein said comparison is made either on the  
photoconductive surface or on a sheet of paper on  
which a toner image of the moiré stripes and the  
reference position mark is created.

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7. The apparatus as claimed in claim 1,  
wherein said drawing systems include:

5 a first drawing system which uses a first  
one of the light beams to draw a first set of lines  
slanted at a predetermined angle; and

10 a second drawing system which uses a  
second one of the light beams to draw a second set  
of lines slanted at an angle opposite to the  
predetermined angle, said first set of lines and  
said second set of lines having an identical line  
pitch and an identical line width.

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8. An apparatus for adjusting position of  
a plurality of light beams, which are simultaneously  
20 modulated according to image signals and joined  
together on a photoconductive surface to form an  
image, comprising:

25 a photoconductive drum having the  
photoconductive surface and a reference mark;  
an pattern supplying unit which supplies

image data in synchronization with detection of the reference mark associated with rotation of the photoconductive drum;

                  drawing systems which create moiré stripes  
5    on the photoconductive surface by simultaneously  
      drawing overlapping sets of slanted lines with the  
      respective light beams according to the image data,  
      and draw a reference position mark on the  
      photoconductive surface according to the image data;  
10    and

                  a circuit which adjusts position of the  
      light beams on the photoconductive surface in a main  
      scan direction according to comparison between  
      position of the moiré stripes and position of the  
15    reference position mark, the main scan direction  
      being substantially parallel to an axis of the  
      photoconductive drum.

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9. An apparatus for forming an image by  
use of a plurality of light beams, which are  
simultaneously modulated according to image signals  
25    and joined together on a photoconductive drum to

form the image, comprising:

means for forming a reference position  
mark on the photoconductive drum; and

means for forming moiré stripes on the  
5 photoconductive drum by simultaneously drawing  
overlapping sets of slanted lines with the  
respective light beams.

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10. The apparatus as claimed in claim 9,  
further comprising computing means for computing an  
amount of correction of position of the light beams  
15 on the photoconductive drum in a main scan direction  
in response to comparison between position of the  
moiré stripes and position of the reference position  
mark, the main scan direction being substantially  
parallel to an axis of the photoconductive drum.

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11. The apparatus as claimed in claim 9,  
25 further comprising means for adjusting position of

the light beams on the photoconductive drum in a main scan direction according to comparison between position of the moiré stripes and position of the reference position mark, the main scan direction 5 being substantially parallel to an axis of the photoconductive drum.

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12. The apparatus as claimed in claim 10, further comprising means for detecting the position of the moiré stripes.

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13. The apparatus as claimed in claim 10, wherein said computing means computes the amount of 20 correction of position of the light beams by interpolating data that are obtained for at least three positions along a circumference of the photoconductive drum.

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14. The apparatus as claimed in claim 10,  
wherein said comparison is made either on the  
5 photoconductive surface or on a sheet of paper on  
which a toner image of the moiré stripes and the  
reference position mark is created.

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15. The apparatus as claimed in claim 9,  
wherein said means for forming moiré stripes  
include:  
15 a first drawing system which uses a first  
one of the light beams to draw a first set of lines  
slanted at a predetermined angle; and  
a second drawing system which uses a  
second one of the light beams to draw a second set  
20 of lines slanted at an angle opposite to the  
predetermined angle, said first set of lines and  
said second set of lines having an identical line  
pitch and an identical line width.

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16. An apparatus for adjusting position of  
a plurality of light beams, which are simultaneously  
5 modulated according to image signals and joined  
together on a photoconductive drum to form an image,  
comprising:

means for forming a reference position  
mark on the photoconductive drum;

10 means for forming moiré stripes on the  
photoconductive drum by simultaneously drawing  
overlapping sets of slanted lines with the  
respective light beams; and

means for adjusting position of the light  
15 beams on the photoconductive drum in a main scan  
direction according to comparison between position  
of the moiré stripes and position of the reference  
position mark, the main scan direction being  
substantially parallel to an axis of the  
20 photoconductive drum.